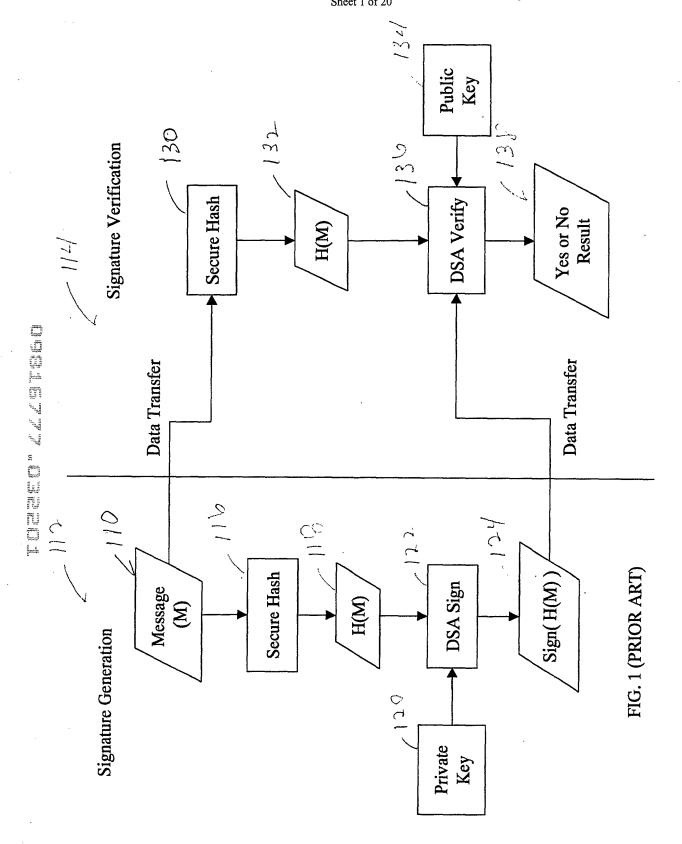
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Atty. Docket: 16869P018300
Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data Applicant: Kunihiko Miyazaki et al.
Sheet 1 of 20



George B. F. Yee, Reg No. 37,478, (650) 326-2400 Atty. Docket: 16869P018300

Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data Applicant: Kunihiko Miyazaki et al.

Sheet 2 of 20

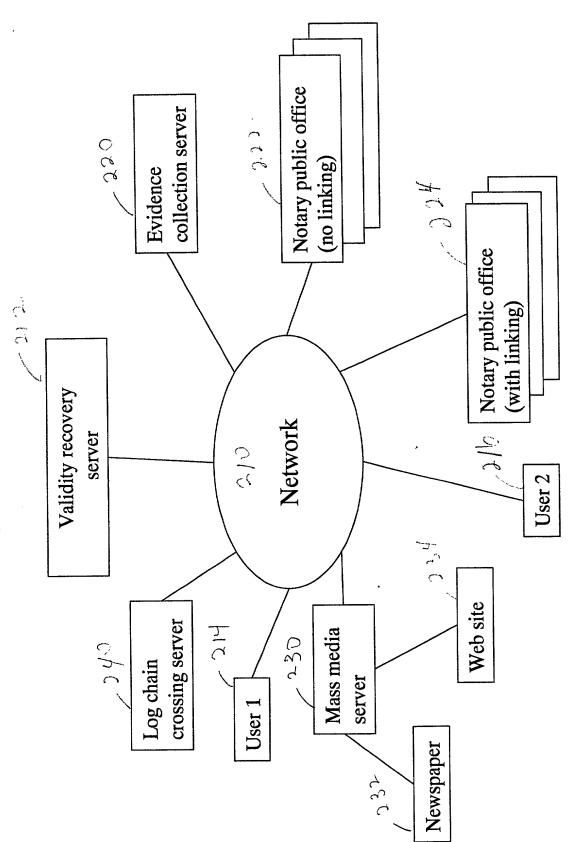


FIG. 2 Validity Recovery System

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Atty. Docket: 16869P018300
Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.
Sheet 3 of 20

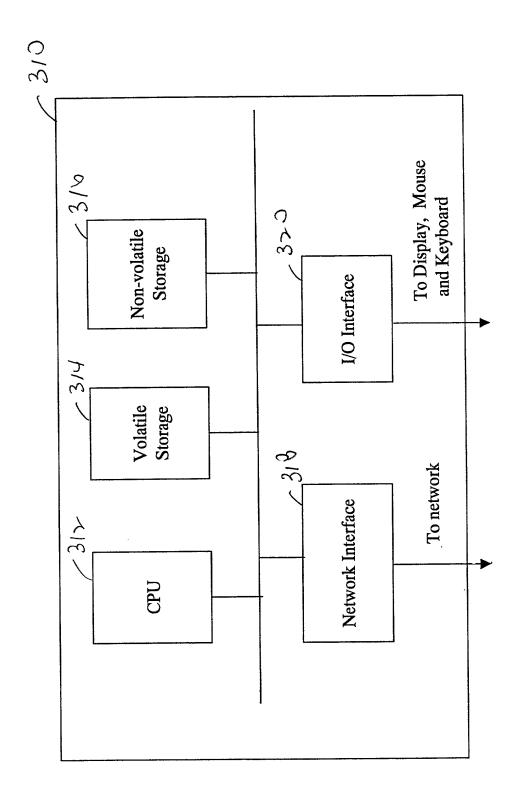


FIG. 3 Example computer

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Atty. Docket: 16869P018300
Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki & al.
Sheet 4 of 20

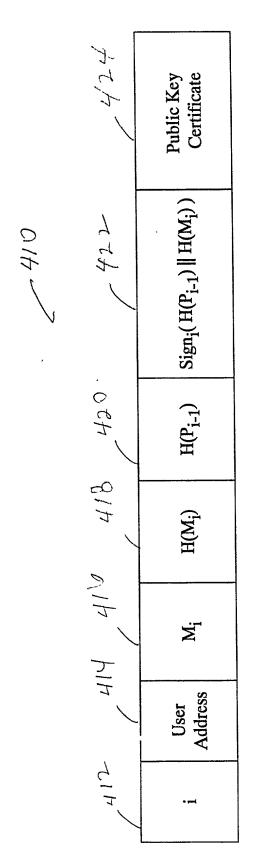


FIG. 4 Message Format

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Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data Applicant: Kunihiko Miyazaki et al.
Sheet 5 of 20

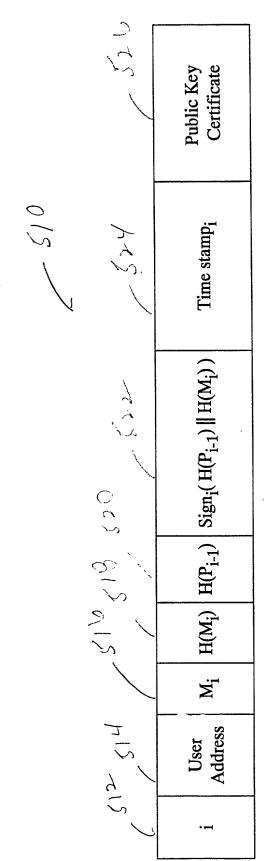


FIG. 5 Message Format with Timestamp

Sheet 6 of 20

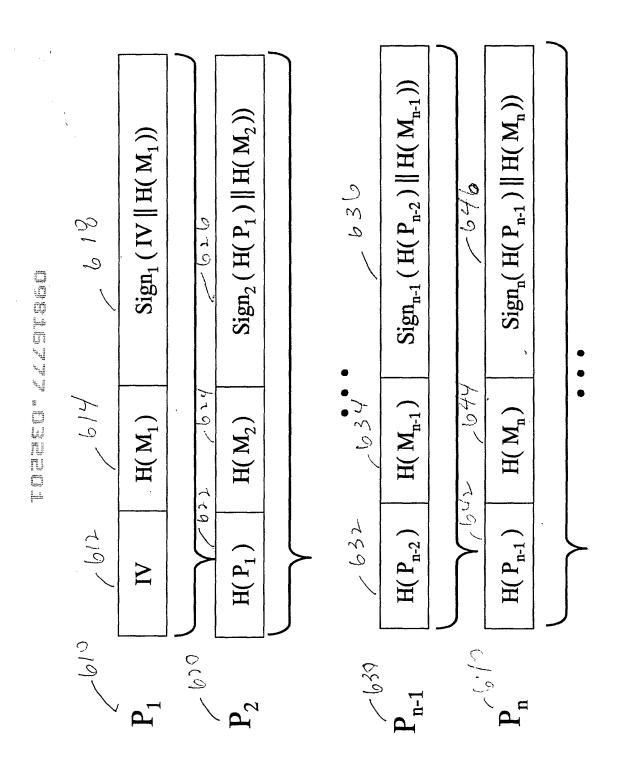
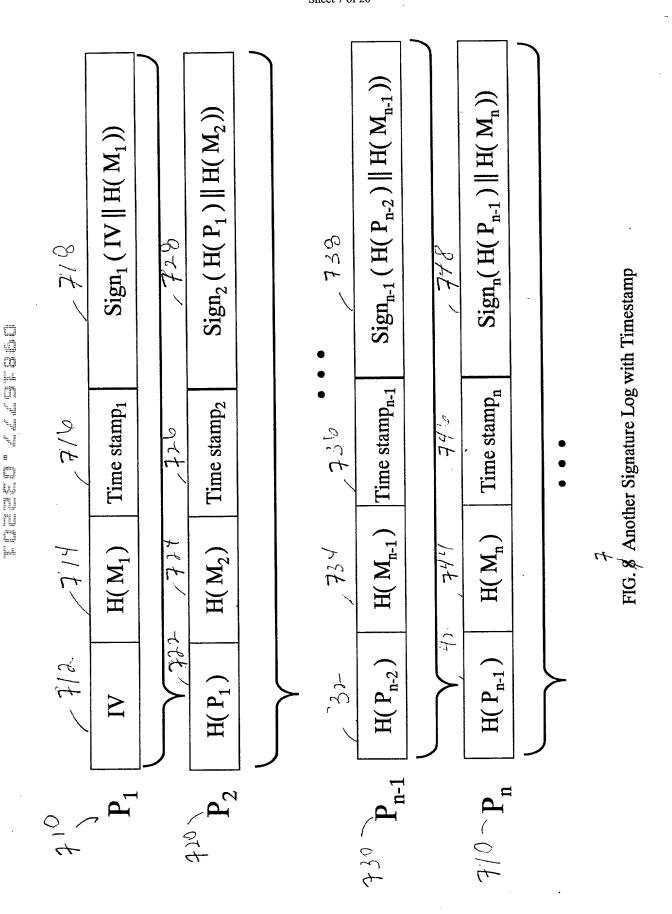


FIG. 6 Signature Log

Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.
Sheet 7 of 20



Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.
Sheet 8 of 20

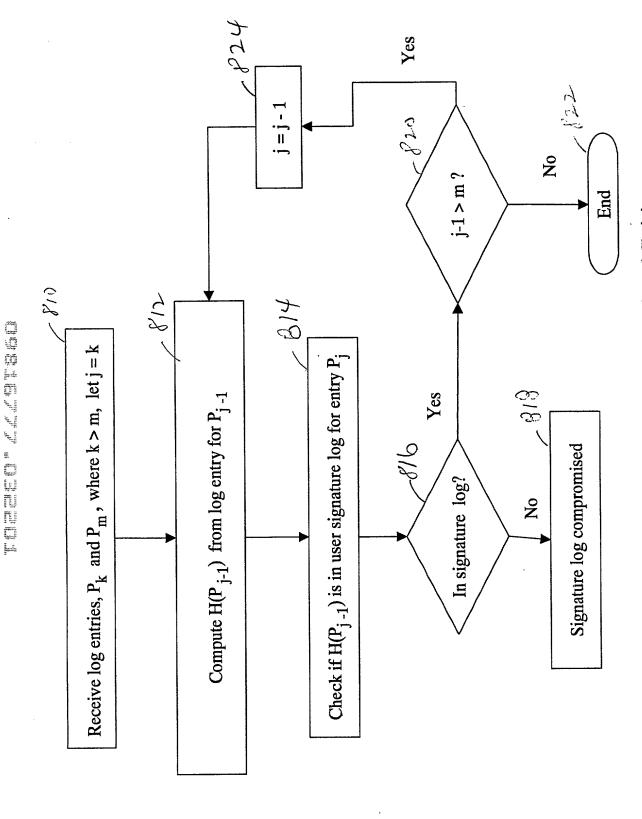
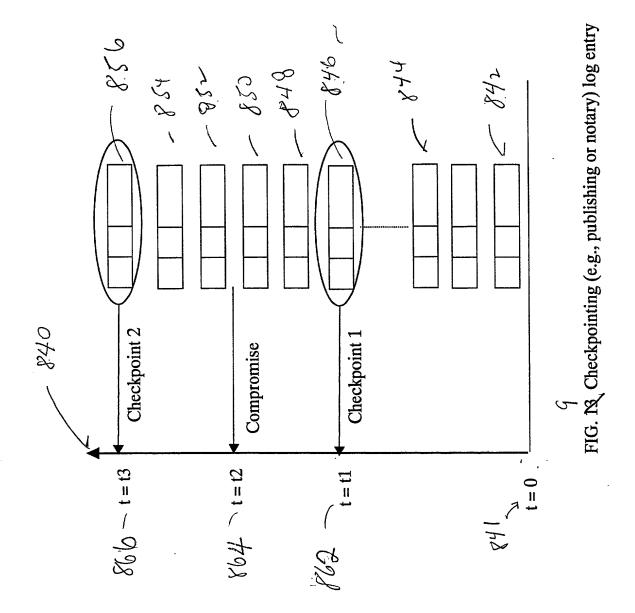


FIG. 8 Validating Log Entries - Backward Chaining

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Atty. Docket: 16869P018300
Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.
Sheet 9 of 20



George B. F. Yee, Reg No. 37,478, (650) 326-2400
Atty. Docket: 16869P018300
Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.
Sheet 10 of 20

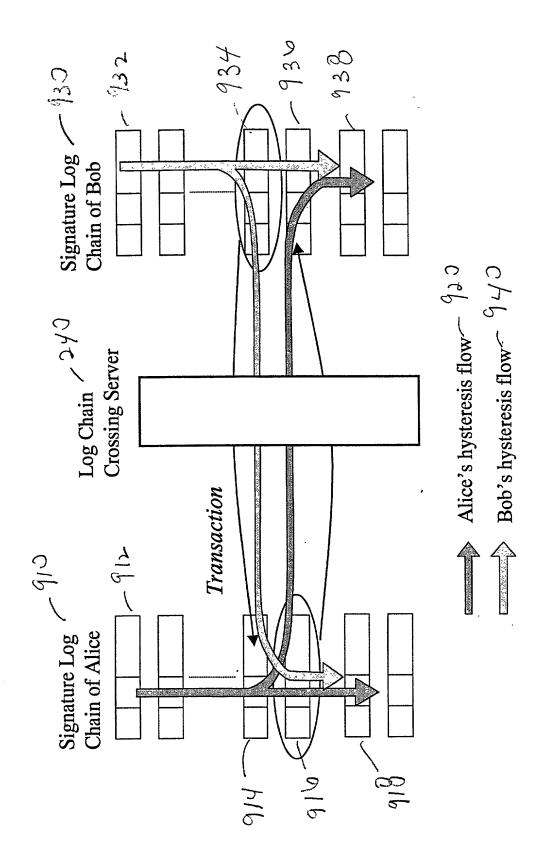
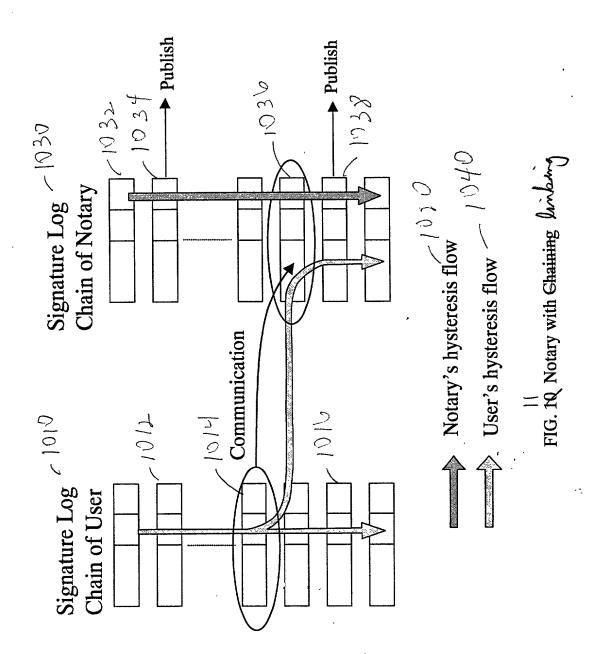
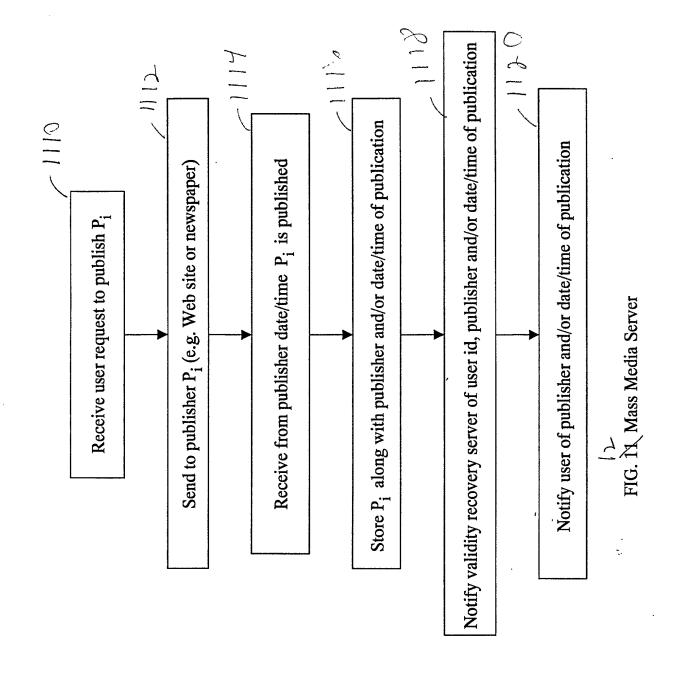


FIG. 10 Log Chain Crossing Server

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Atty. Docket: 16869P018300
Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.
Sheet 11 of 20



George B. F. Yee, Reg No. 37,478, (650) 326-2400
Atty. Docket: 16869P018300
Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data Applicant: Kunihiko Miyazaki et al.
Sheet 12 of 20



George B. F. Yee, Reg No. 37,478, (650) 326-2400
Atty. Docket: 16869P018300
Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.
Sheet 13 of 20

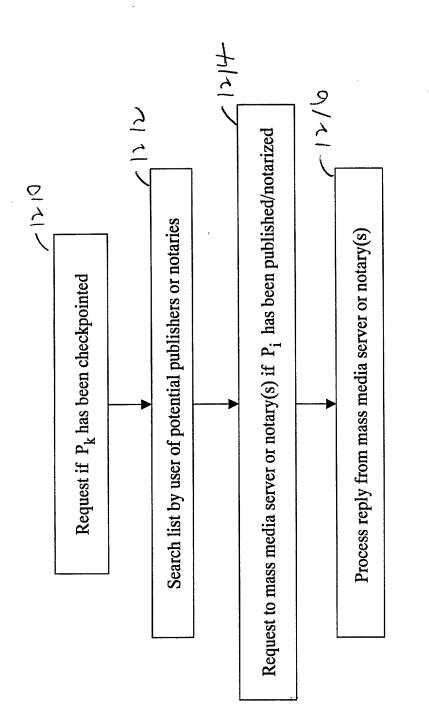


FIG. 13 Recovery Server determining if signature log entry has been checkpointed

Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.

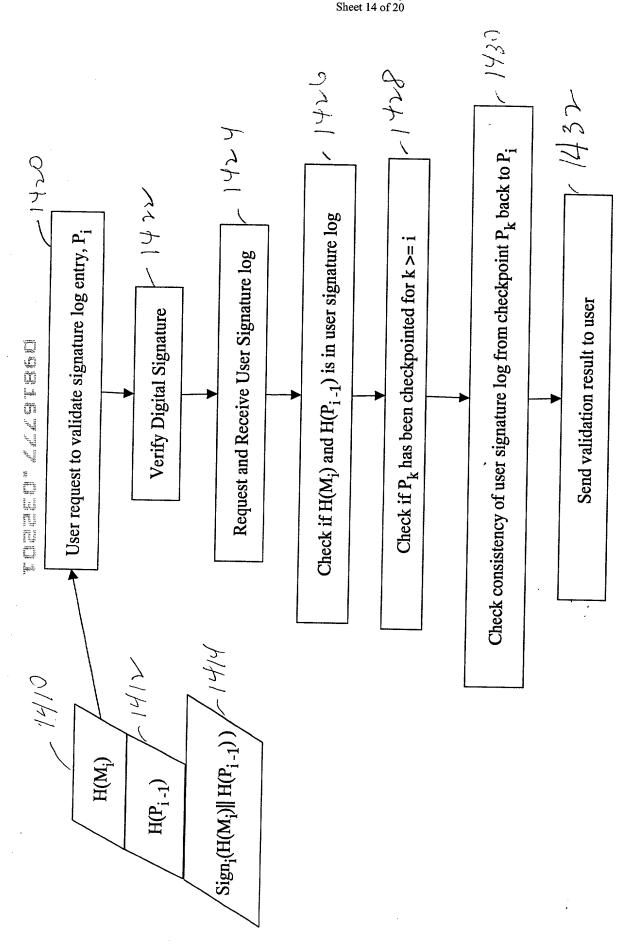


FIG. 14 Recovery Server Validating a user Signature Log Entry

Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.
Sheet 15 of 20

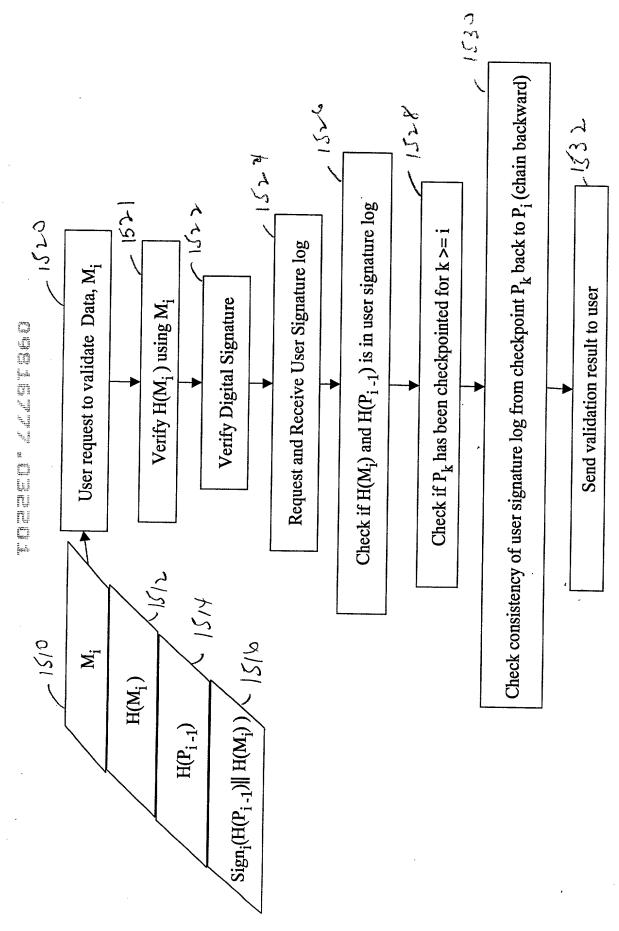
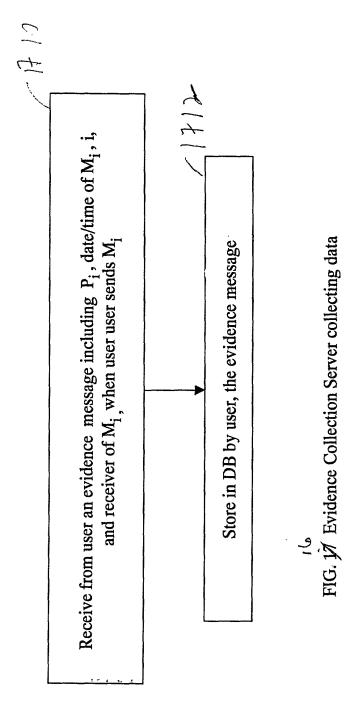
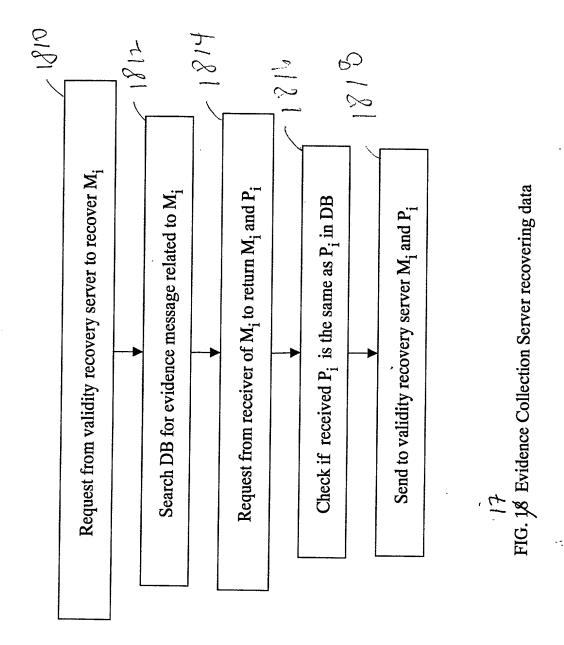


FIG. 15 Recovery Server Validating a user data item

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Atty. Docket: 16869P018300
Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data Applicant: Kunihiko Miyazaki et al.
Sheet 16 of 20



George B. F. Yee, Reg No. 37,478, (650) 326-2400
Atty. Docket: 16869P018300
Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.
Sheet 17 of 20



Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki-et al.
Sheet 18 of 20

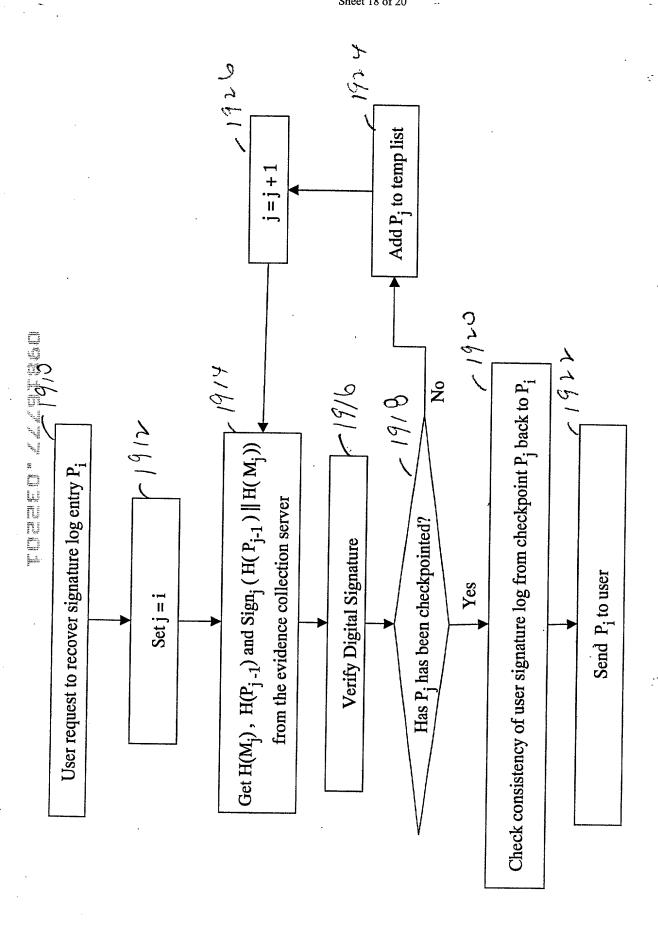
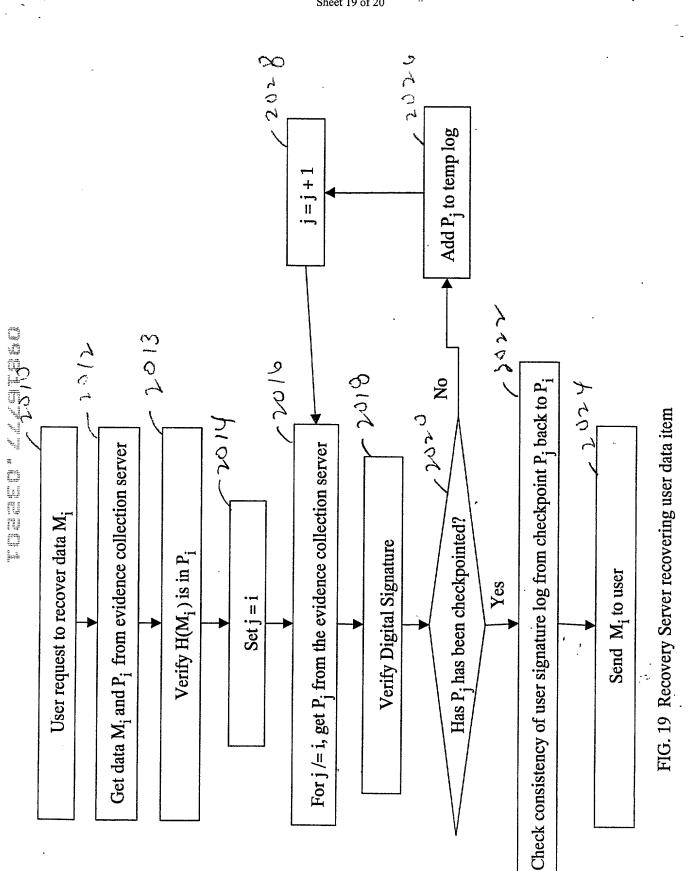


FIG. 18 Recovery Server recovering user signature log entry

Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.
Sheet 19 of 20



George B. F. Yee, Reg No. 37,478, (650) 326-2400
Atty. Docket: 16869P018300
Title: Method and System for Recovering the Validity of Cryptographically Signed Digital Data
Applicant: Kunihiko Miyazaki et al.
Sheet 20 of 20

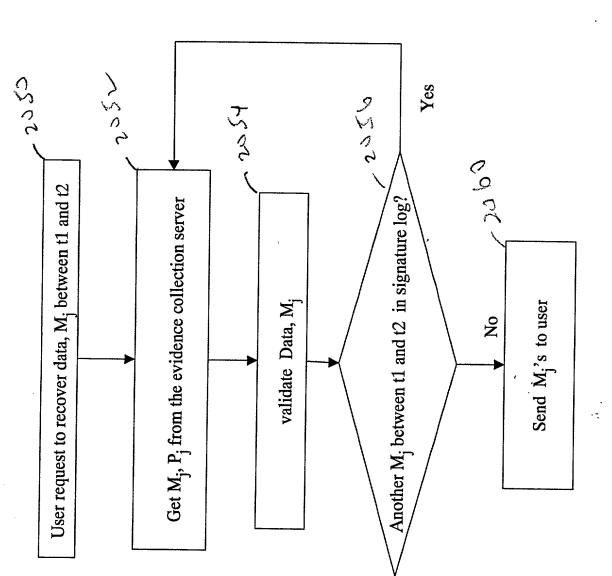


FIG. 20 Recovery Server recovering user data between two points in time